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10/081,694

02/22/2002

Theodore B. Ziemkowski

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07/28/2005

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FORT COLLINS, CO 80527-2400

EXAMINER

DANIELS, ANTHONY J

ART UNIT

PAPER NUMBER

2615

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/081,694

Applicant(s)

ZIEMKOWSKI, THEODORE B.

Examiner

Anthony J. Daniels

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-17,19 and 21-28 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,2,4-17,19 and 21-28 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

***Response to Amendment***

1. The amendment, filed 4/25/2005, has been entered and made of record. Claims 1,2,4-17,19,21-28 are pending in the application.

***Response to Arguments***

2. Applicant's arguments with respect to claims 1,4-8,17,21-23 have been considered but are moot in view of the new ground(s) of rejection.
3. Applicant's arguments, see Remarks, p. 8,9,11,12, filed 4/25/2005, with respect to Claims 9,10-16,24-28 have been fully considered and are persuasive. The rejection of Claims 9,10-16,24-28 has been withdrawn.
4. Applicant's arguments filed 4/25/2005 in Remarks, p. 10 with respect to claims 2,19 have been fully considered but they are not persuasive. Examiner's arguments can be found in the context of the rejections below.

***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1,4,8,17,21,22 are rejected under 35 U.S.C. 102(b) as being anticipated by Oie (US # 6,188,431).

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As to claim 1, Oie teaches a digital image capturing system (Figure 3), comprising: at least two digital image capturing devices (Figure 3, electronic still camera “1a” and electronic still camera “1b”); and a bi-directional link cable connecting said at least two digital image capturing devices (Figure 3, cable “69”; Col. 5, Lines 64-67; Col. 6, Lines 1-3); wherein said at least two digital image capturing devices are capable of sharing data items over said bi-directional link cable (Col. 4, Lines 58-61; Col. 6, Lines 7-16); and the sharing of said data items comprises sharing images captured by one of the at least two digital image capturing devices over said cable (Col. 5, Lines 53-63).

As to claim 4, Oie teaches the device of claim 1, wherein the sharing of said data items comprises sharing image information (Col. 4, Lines 16-19).

As to claim 8, Oie teaches the device of claim 1, wherein a digital image capturing device of said at least two digital image capturing devices operates as a pseudo host ((a) Transmission process and (b) Receiving Process; *{Pseudo host is interpreted in light of the specification, [0019], Lines 1,2.}*).

As to claim 17, Oie teaches a method of linking a first digital image capturing device to one or more other digital image capturing devices (Figure 3), comprising the steps of: obtaining a first digital image capturing device (Figure 3, electronic still camera “1a”) capable of sending and receiving data items (Col. 4, Lines 58-61; Col. 5, Lines 64-67; Col. 6, Lines 1-6; (a) Transmitting Process and (b) Receiving Process) over a bi-directional link cable (Figure 3, cable “3”); said first digital image capturing device comprising a first I/O port (Figure 2, I/O port “45”); obtaining a second digital image capturing device (Figure 3, electronic still camera “1b”) capable of sending and receiving data items over a bi-directional link cable ((a) Transmitting

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Process and (b) Receiving Process), said second digital image capturing device comprising a second I/O port (*{The electronic still cameras of Figure 3 are the same.}*); obtaining a bi-directional link cable having a first end and a second end (Figure 3, cable "69"); connecting the first end of the cable to the first I/O port (Figure 3, one end connected to "1a"); connecting the second end of the cable to the second I/O port (Figure 3, second end connected to "1b"); using the first digital image capturing device to capture an image (*From Figure 2, it is inherent that the camera can capture an image.*); and transmitting the first image from the first digital image capturing device to the second digital image capturing device over the bi-directional link cable (*It is inherent that the captured image can be selected and transmitted via the cable "69" as set forth in the rejections the precede.*), which directly connects the first digital image capturing device to the second digital image capturing device (Figure 3).

As to claim 21, Oie teaches the method of claim 17, further comprising the step of sharing image information (Col. 4, Lines 16-19).

As to claim 22, Oie teaches the method of claim 17, wherein the first and/or second digital image capturing device is capable of operating as a pseudo host ((a) Transmission process and (b) Receiving Process; *{Pseudo host is interpreted in light of the specification, [0019], Lines 1,2. It is inherent that the either camera can be established as the pseudo host by pressing the shutter key.}*).

### ***Claim Rejections - 35 USC § 103***

6. Claims 5,6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oie (see Patent Number above).

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As to claim 5, Oie et al. fails to teach the bidirectional link cable comprising an audio/visual (A/V) cable. **Official Notice** is taken that audio/visual (A/V) cables are well known and expected in the art. It would have been obvious to an artisan of ordinary skill in the art to include an audio/visual (A/V) cable as a bidirectional link cable in Oie, because these cables are space efficient, as pertains to the manufacturing of the port to which it is connected, and can be used to transmit data of high fidelity over several meters.

As to claim 6, Oie fails to teach the bidirectional link cable comprising a universal serial bus (USB) cable. **Official Notice** is taken that universal serial bus (USB) cables are well known and expected in the art. It would have been obvious to an artisan of ordinary skill in the art to include a universal serial bus (USB) cable as a bidirectional link cable in Oie, because these cables offers high-speed transmission of data, and are compatible with many other digital products.

7. Claims 2,19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oie (see Patent Number above) in view of Kiyokawa (US # 6,204,877).

As to claim 2, Oie teaches the device of claim 1, wherein the sharing of said data items comprises transmitting images from a first of at least two digital image capturing devices to a second of at least two digital image capturing devices (Col. 6, Lines 17-19), wherein the images are transmitted over the bi-directional cable that connects the first digital image capturing device to the second digital image capturing device (Figure 3, cable “69”; Col. 6, Lines 21-25). The claim differs from Oie in that it further requires that the images be real –time views.

In the same field of endeavor, Kiyokawa teaches a transfer from one electronic still camera to another electronic still camera a real-time image view (Figure 1; Col. 2, Lines 13-18; "...transmitting *upon* photoelectric conversion..."). *With respect to arguments of claims 2, 19, the examiner respectfully disagrees. Applicant correctly points out the Steinberg et al. does not disclose, teaches, or suggest transmitting an image from one digital camera to another using a bi-directional link cable. This void has been filled by Oie. Therefore, it is respectfully submitted that the examiner is not relying on Kiyokawa to teach or suggest directly connecting one digital camera to another using only a bi-directional link cable. Examiner only relies on the teaching of Kiyokawa to teach the digital, wired transmission of images from one digital camera to another. The combination is believed to be valid, because Kiyokawa teaches transmitting images in real-time via a more complicated path (i.e. a modem and telephone line) than simply a cable. In light of the teaching of Kiyokawa, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Oie to include real time transmission of the image data, as taught by Kiyokawa, because an artisan of ordinary skill in the art would recognize that real time transmission of image data allows users of the system to view a particular scene, in real time, even if they are not physically in the vicinity or witnessing the scene.*

As to claim 19, Oie teaches the method of claim 17, further comprising the step of transmitting images from the first digital image capturing device to the second digital image capturing device (Col. 6, Lines 17-19), wherein the images are transmitted over the bi-directional cable that directly connects the first digital image capturing device to the second digital image

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capturing device (Figure 3, cable “69”; Col. 6, Lines 21-25). The claim differs from Oie in that it further requires that the images be real -time views.

In the same field of endeavor, Kiyokawa teaches a transfer from one electronic still camera to another electronic still camera a real-time image view (Figure 1; Col. 2, Lines 13-18; “...transmitting *upon* photoelectric conversion...”). *With respect to arguments of claims 2, 19, the examiner respectfully disagrees. Applicant correctly points out the Steinberg et al. does not disclose, teaches, or suggest transmitting an image from one digital camera to another using a bi-directional link cable. This void has been filled by Oie. Therefore, it is respectfully submitted that the examiner is not relying on Kiyokawa to teach or suggest directly connecting one digital camera to another using only a bi-directional link cable. Examiner only relies on the teaching of Kiyokawa to teach the digital, wired transmission of images from one digital camera to another. The combination is believed to be valid, because Kiyokawa teaches transmitting images in real-time via a more complicated path (i.e. a modem and telephone line) than simply a cable. In light of the teaching of Kiyokawa, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Oie to include real time transmission of the image data, as taught by Kiyokawa, because an artisan of ordinary skill in the art would recognize that real time transmission of image data allows users of the system to view a particular scene, in real time, even if they are not physically in the vicinity or witnessing the scene.*

8. Claims 7,9,10,12-16,23,24,26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oie (see Patent Number above) in view of Watanbe (US 20020196197).



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As to claim 7, Oie teaches the device of claim 1, with a digital image capturing device of said at least two digital image capturing devices further comprising: an input/output (I/O) port (Figure 3, Figure 2, I/O port "45") capable of connecting to said bi-directional link cable (Col. 3, Lines 45-48); a processor (Figure 2, CPU "39") communicating with said I/O port (Col. 4, Lines 28-32; Col. 6, Lines 21-25); and a memory (Figure 2, flash memory "35" and ROM "41") communicating with said processor (Col. 6, Lines 21,22) and including an image storage (Col. 6, Line 21, "...image data stored in flash memory..."), an image receive driver, and an image transmit driver (Col. 4, Lines 25-32); determines if said digital image capturing device is a master or a slave (Col. 6, Lines 3-6), and shares said data items over said bi-directional link cable (Col. 6, Lines 21-25). The claim differs from Oie in that it further requires that said processor determines if said I/O port is connected to said bi-directional link cable.

In the same field of endeavor, Watanabe teaches connection detection means for detecting a connection state between a 1394 serial bus and a digital video camera (see [0231], Lines 1-6). In light of the teaching of Watanabe, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the connection detection means of Watanabe in the system of Oie, because an artisan of ordinary skill in the art would recognize that this connection detection means would help prevent transfer without connection and ensure successful transfers.

As to claim 9, Oie teaches a digital image capturing device (Figure 1, Figure 2), comprising: an input/output (I/O) port (Figure 2, I/O port "45") capable of connecting to a bi-directional link cable (Figure 2, I/O port "45", communication channel "47"; Figure 3, cable "69"); a processor (Figure 2, CPU "39") communicating with said I/O port (Col. 4, Lines 28-32;

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Col. 6, Lines 21-25); and a memory (Figure 2, flash memory “35” and ROM “41”) communicating with said processor (Col. 6, Lines 21,22) and including an image storage (Col. 6, Line 21, “...image data stored in flash memory...”, an image receive driver, and an image transmit driver (Col. 4, Lines 25-32); determines if said digital image capturing device is a master or a slave (Col. 6, Lines 3-6), and shares said data items over said bi-directional link cable (Col. 6, Lines 21-25). The claim differs from Oie in that it further requires that said processor determines if said I/O port is connected to said bi-directional link cable.

In the same field of endeavor, Watanabe teaches connection detection means for detecting a connection state between a 1394 serial bus and a digital video camera (see [0231], Lines 1-6). In light of the teaching of Watanabe, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the connection detection means in the method of in the system of Oie, because an artisan of ordinary skill in the art would recognize that this connection detection means would help prevent transfer without connection and ensure successful transfers.

As to claim 10, Oie, as modified by Watanbe, teaches the device of claim 9, wherein the sharing of said data items comprises transmitting and receiving data items (Col. 5, Lines 64-67; Col. 6, Lines 1-3).

As to claim 12, Oie, as modified by Watanbe, teaches the device of claim 9, wherein the sharing of said data items comprises sharing images (Col. 6, Lines 17-19; Col. 7, Lines 4-14).

As to claim 13, Oie teaches the device of claim 9, wherein the sharing of said data items comprises sharing image information (Col. 4, Lines 16-20).

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As to claim 14, Oie, as modified by Watanabe, fails to teach the bidirectional link cable comprising an audio/visual (A/V) cable. **Official Notice** is taken that audio/visual (A/V) cables are well known and expected in the art. It would have been obvious to an artisan of ordinary skill in the art to include an audio/visual (A/V) cable as a bidirectional link cable in Oie, as modified by Watanabe, because these cables are space efficient, as pertains to the manufacturing of the port to which it is connected, and can be used to transmit data of high fidelity over several meters.

As to claim 15, Oie, as modified by Watanabe, fails to teach the bidirectional link cable comprising a universal serial bus (USB) cable. **Official Notice** is taken that universal serial bus (USB) cables are well known and expected in the art. It would have been obvious to an artisan of ordinary skill in the art to include a universal serial bus (USB) cable as a bidirectional link cable in Oie, as modified by Watanabe, because these cables offers high-speed transmission of data, and are compatible with many other digital products.

As to claim 16, Oie teaches the device of claim 9, wherein said digital image capturing device operates as a pseudo host ((a) Transmission process and (b) Receiving Process; *{Pseudo host is interpreted in light of the specification, [0019], Lines 1,2. It is inherent that the either camera can be established as the pseudo host by pressing the shutter key.}*).

As to claim 23, Oie teaches the method of claim 17, further comprising the steps of: accepting a master or slave input that determines whether said digital image capturing device is a master or a slave (Col. 5, Lines 64-67; Col. 6, Lines 1-6); accepting an image selection of a first data item to be sent to a connected slave digital image capturing device if said digital image capturing device is a master (Col. 5, Lines 53-64; Col. 6, Lines 17-19); transmitting said first

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data item to said connected slave digital image capturing device if said digital image capturing device is a master (Col. 6, Lines 17-19); accepting a second data item from a connected master digital image capturing device if said digital image capturing device is a slave (Col. 6, Lines 17-19); and displaying said second data item on said digital image capturing device if said digital image capturing device is a slave (Col. 6, Lines 31-36). The claim differs from Oie in that it further requires the step of detecting a connection of a bi-directional link cable in said digital image capturing device.

In the same field of endeavor, Watanabe teaches connection detection means for detecting a connection state between a 1394 serial bus and a digital video camera (see [0231], Lines 1-6). In light of the teaching of Watanabe, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the step of detecting a connection of a bi-directional link cable in said digital image capturing device in the method of in the system of Oie, because an artisan of ordinary skill in the art would recognize that this connection detection means would help prevent transfer without connection and ensure successful transfers.

As to claim 24, Oie teaches a method of linking a first digital image capturing device to one or more other digital image capturing devices, comprising the steps of: accepting a master or slave input that determines whether said digital image capturing device is a master or a slave (Col. 5, Lines 64-67; Col. 6, Lines 1-6); accepting an image selection of a first data item to be sent to a connected slave digital image capturing device if said digital image capturing device is a master (Col. 5, Lines 53-64; Col. 6, Lines 17-19); transmitting said first data item to said connected slave digital image capturing device if said digital image capturing device is a master (Col. 6, Lines 17-19); accepting a second data item from a connected master digital image

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capturing device if said digital image capturing device is a slave (Col. 6, Lines 17-19); and displaying said second data item on said digital image capturing device if said digital image capturing device is a slave (Col. 6, Lines 31-36). The claim differs from Oie in that it further requires the step of detecting a connection of a bi-directional link cable in said digital image capturing device.

In the same field of endeavor, Watanabe teaches connection detection means for detecting a connection state between a 1394 serial bus and a digital video camera (see [0231], Lines 1-6). In light of the teaching of Watanabe, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the step of detecting a connection of a bi-directional link cable in said digital image capturing device in the method of in the system of Oie, because an artisan of ordinary skill in the art would recognize that this connection detection means would help prevent transfer without connection and ensure successful transfers.

As to claim 26, Oie, as modified by Watanbe, teaches the method of claim 24, wherein the first digital image capturing device and the second digital image capturing device share images (Col. 5, Lines 53-64; Col. 6, Lines 17-19).

As to claim 27, Oie, as modified by Watanbe, teaches the method of claim 24, wherein the first digital image capturing device and the second digital image capturing device share image information (Col. 4, Lines 16-20; Col. 5, Lines 53-64; Col. 6, Lines 17-19).

As to claim 28, Oie, as modified by Watanbe, teaches the method of claim 24, wherein a master digital image capturing device operates as a pseudo host ((a) Transmission process and (b) Receiving Process; *{Pseudo host is interpreted in light of the specification, [0019], Lines 1,2.*

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*It is inherent that the either camera can be established as the pseudo host by pressing the shutter key.})).*

9. Claims 11,25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oie (see Patent Number above) in view of Watanbe (see Patent Number above) and further in view of Kiyokawa (see Patent Number above).

As to claim 11, Oie, as modified by Watanbe, teaches the device of claim 9. The claim differs from Oie, as modified by Watanbe, in that it further requires that the sharing of said data items comprises sharing real time image views.

In the same field of endeavor, Kiyokawa teaches a transfer from one electronic still camera to another electronic still camera a real-time image view (Figure 1; Col. 2, Lines 13-18; "...transmitting *upon* photoelectric conversion..."). In light of the teaching of Kiyokawa, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Oie, as modified by Watanbe, to include real time transmission of the image data, as taught by Kiyokawa, because an artisan of ordinary skill in the art would recognize that real time transmission of image data allows users of the system to view a particular scene, in real time, even if they are not physically in the vicinity or witnessing the scene.

As to claim 25, Oie, as modified by Watanbe, teaches the method of claim 24. The claim differs from Oie, as modified by Watanbe, in that it further requires that the first digital image capturing device and the second digital image capturing device share real time image views.

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In the same field of endeavor, Kiyokawa teaches a transfer from one electronic still camera to another electronic still camera a real-time image view (Figure 1; Col. 2, Lines 13-18; "...transmitting *upon* photoelectric conversion..."). In light of the teaching of Kiyokawa, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Oie, as modified by Watanbe, to include real time transmission of the image data, as taught by Kiyokawa, because an artisan of ordinary skill in the art would recognize that real time transmission of image data allows users of the system to view a particular scene, in real time, even if they are not physically in the vicinity or witnessing the scene.

### ***Conclusion***


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony J. Daniels whose telephone number is (571) 272-7362. The examiner can normally be reached on 8:00 A.M. - 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AD  
7/13/2005



NGOO YEN VU  
PRIMARY EXAMINER